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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,116	04/16/2004	Yoji Seto	023971-0403	7718
23428 7590 06/17/2009 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
JEN, MINGJEN				
ART UNIT		PAPER NUMBER		
3664				
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06/17/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/825,116

**Applicant(s)**

SETO, YOJI

**Examiner**

IAN JEN

**Art Unit**

3664

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,7-9 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,7-9, 19-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date 11/16/2006/04/16/2004
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is response to the amendment entered on April 16<sup>th</sup>, 2009
2. Claim 2 have been amended.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 3, 7, 9, 19 and 20 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Arita et al ( JP 11142520 in view of English translation) in view of Bai et al ( US Pat Pub 2003/0201878 )

As for claim 1, 19, 20, Arita et al shows a vehicular forward substance detecting section and method that detects a forward substance located in a forward direction of the vehicle ( Para 0009, 0010, 0028, 0035, 0039, 0045, 0065-0067; Fig 2 ); a vehicular travel controlling section that performs a vehicular travel control on the basis of a relative positional relationship between the forward substance detected by the vehicular forward substance detecting section and the vehicle ( Para 0009, 0010, 0028, 0035, 0039, 0045, 0065-0067; Fig 2 ); an impulse detecting section that

detects such an impulse that a detection range of the vehicular forward substance detecting section is varied has been applied to the vehicular forward substance detecting section ( Para 0009, 0010, 0028, 0035, 0039, 0045, 0065-0067; Fig 2 ). Arita is silent regarding a traveling control inhibiting section that inhibits the vehicular travel control by the vehicular travel controlling section when the impulse detecting section detects that the impulse has been applied to the vehicular forward substance detecting section.

Bai et al shows a traveling control inhibiting section that inhibits the vehicular travel control by the vehicular travel controlling section when the impulse detecting section detects that the impulse has been applied to the vehicular forward substance detecting section ( Fig 1, See warning/control determining logic 5; collision avoidance with actuator/brake system 6 ).

It would have been obvious for one of ordinary skill in the art to provide a traveling control section, as taught by Bai et al, to Arita et al, in order to provide a practical implementation of the radar/sensor system as both taught by Arita and Bai et al.

As for claim 2, Arita et al shows a detection range variation informing section that informs a vehicular occupant of the variation in the detection range of the vehicular forward substance detecting section when the impulse detecting section detects that the impulse has occurred ( Para 0017, Para 0021, Par 0026, Para 0059-0064 ).

As for claim 3, 7, Arita et al shows a variation rate estimating section that estimates a variation rate of the detection range of the vehicular forward substance detecting section when the impulse detecting section detects that the impulse has been applied to the vehicular forward

substance detecting section ( Para 0024, 0025; Para 0032—0039; Para 0056-0068 ); a vehicular traveling control modifying section that modifies a control method of the vehicular travel controlling section in accordance with the variation rate estimated by the variation rate estimating section ( Par 0056 – 0068; Para 0071 - 0075); the impulse detecting section detects the impulse on the basis of the relative positional relationship (Para 0024, 0025; Para 0032—0039; Para 0056-0068 ).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arita et al ( JP 11142520 in view of English translation) in view of Bai et al ( US Pat Pub 2003/0201878 ) and further in view of Maruko et al ( US Pat Pub No 2002/0091479 ) and Kodaka et al ( US Pat Pub No 2001/0016798 ).

As for claim 8, Arita et al is silent regarding recite claim limitation.

Maruko et al shows show a collision avoidance determining section that determines whether it is possible to avoid a collision of the vehicle against the forward substance by a vehicular brake system and braking characteristic of vehicle, a steering characteristic ( Para 0031- 0038 ). Kodaka et al shows wheather it is possible to avoid the collision of the vehicle against the forward substance by a driver's vehicular steering on the basis of the relative positional relationship to the forward substance detected by the vehicular forward substance detecting section ( Para 0044 - 0050 ) and wherein both Maruko et al show both the possible and impossible avoidance determination in Step 109; Kodaka shows both the possible and impossible avoidance determination in Fig 6, Fig 12 and 19.

It would have been obvious for one of ordinary skill in the art, to provide the possible avoidance means, as taught by Markuo and Kodaka, to the detecting means of Arita et al, in order to provide collision avoidance as taught among Arita, Markuo and Kodaka.

As for claim 9, Arita et al shows the vehicular traveling control modifying section performs the a vehicular traveling control only for a smaller relative positional relationship to the forward substance as the variation rate of the detection range estimated by the variation rate estimating section becomes large or from large to small ( Para 0012-0017; Para 0031- 0039 ).

#### ***Response to Arguments***

6. In response to applicant's remark that the recited claim limitation of claim 1, "an impulse detecting section that detects such an impulse that a detection range of the vehicular forward substance detecting section is varied has been applied to the vehicular forward substance detecting section" has not been show. Applicant's attention is directed to Arita et al, paragraph 0004, where states a forward substance ,such as precedence vehicle stated in paragraph 001, to be detected, with respect to a detection angle to be adjusted/varied shown on paragraph 0005, 0006.

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure  
Yano et al (US Pat Pub 20070129891).

Knoop et al (US Pat No 7015805).

Condo et al (US Pat Pub 20070032914).

Isaji et al (US Pat Pub 20050128063).

Seto et al (US pat Pub 20040145238/20020152015).

Seto et al (US Pat Pub 20030067219/20030028311/7099764).

Yamamura et al (US Pat pub 20020169538).

Akabori et al (US Pat Pub 2002011173/20020099491).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN JEN whose telephone number is (571)270-3274. The examiner can normally be reached on Monday - Friday 9:00-6:00 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/825,116  
Art Unit: 3664

Page 7

/Ian Jen/  
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Supervisory Patent Examiner, Art Unit 3664